

FIGURE 1

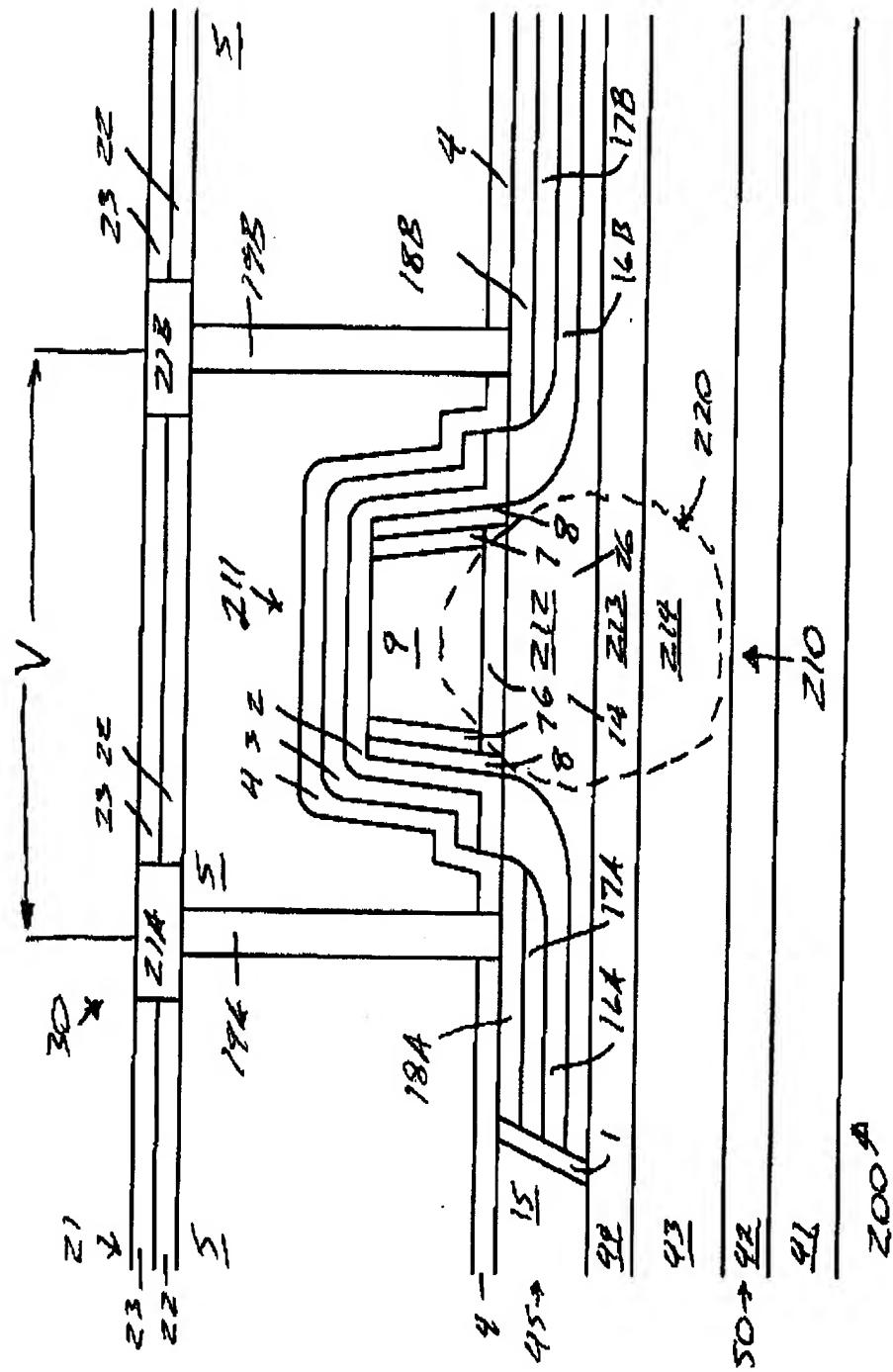


FIGURE 2

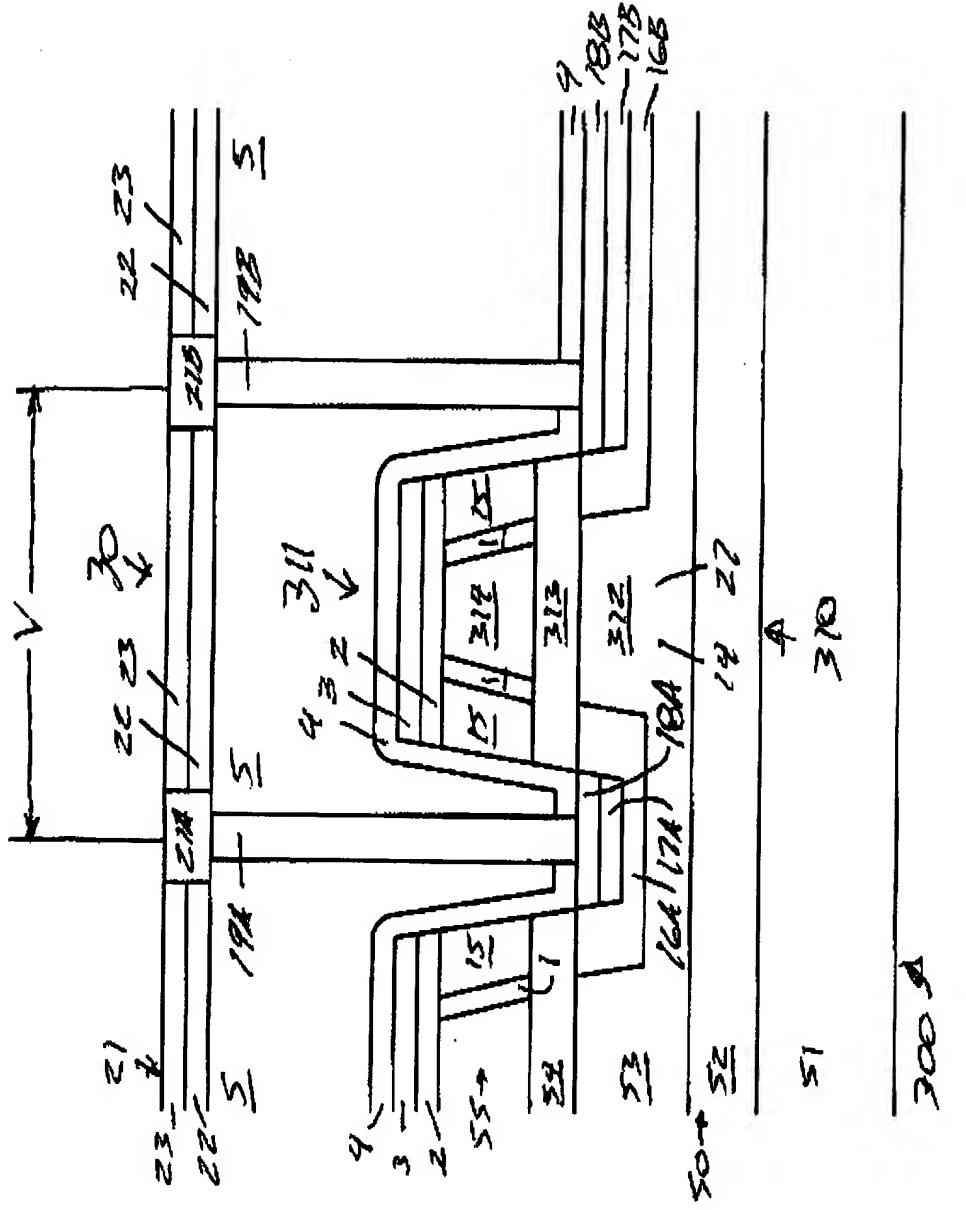


FIGURE 3

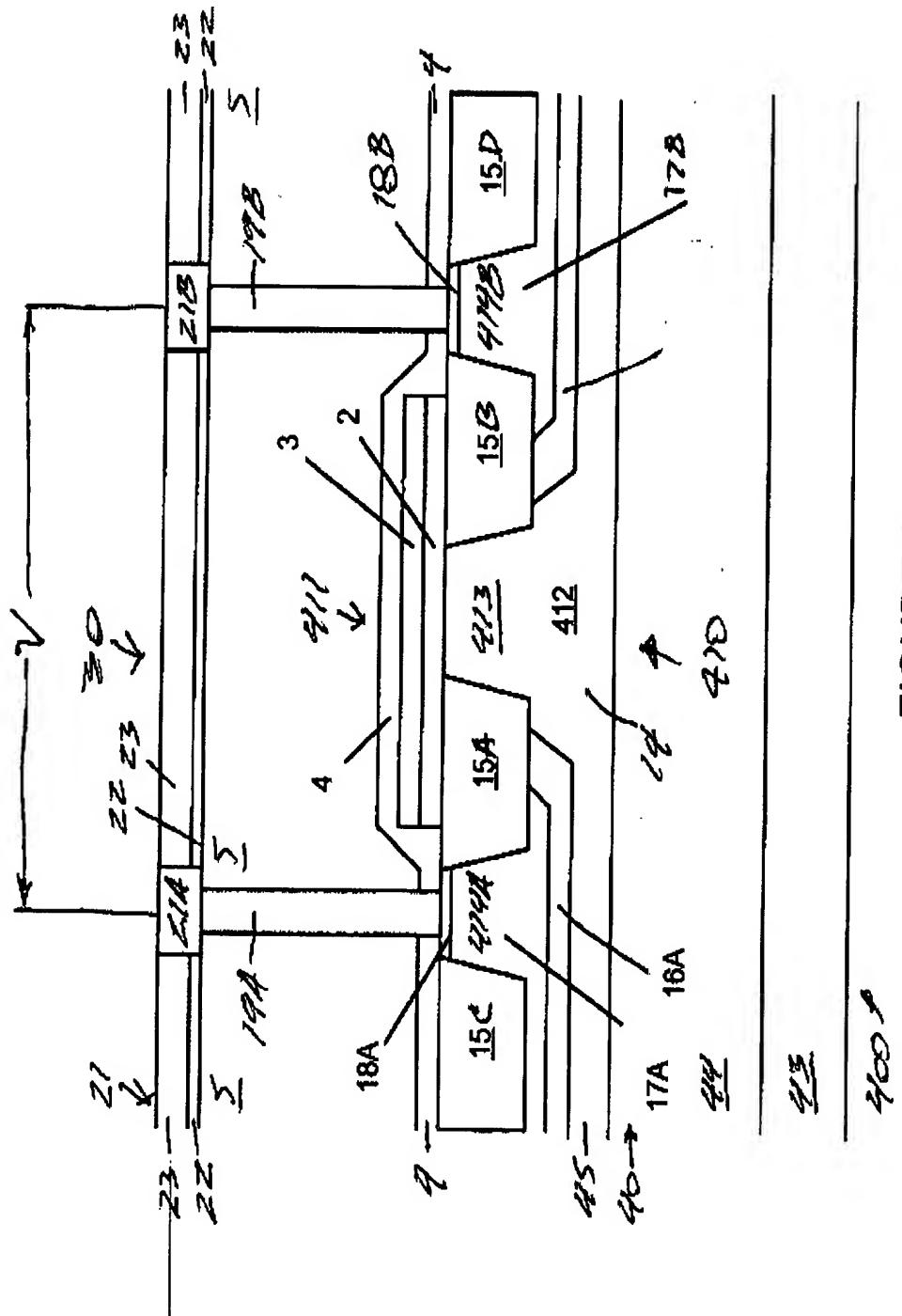


FIGURE 4

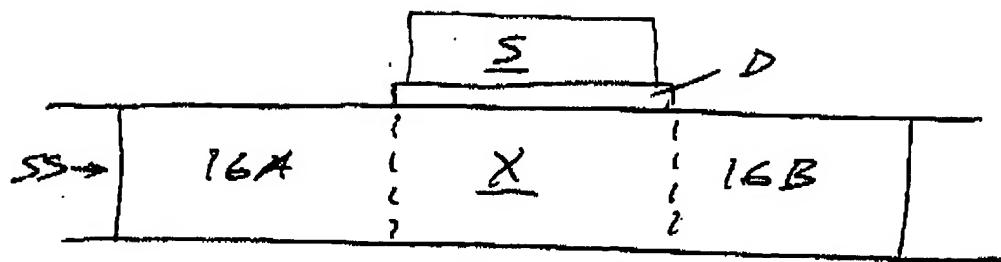


FIGURE 5

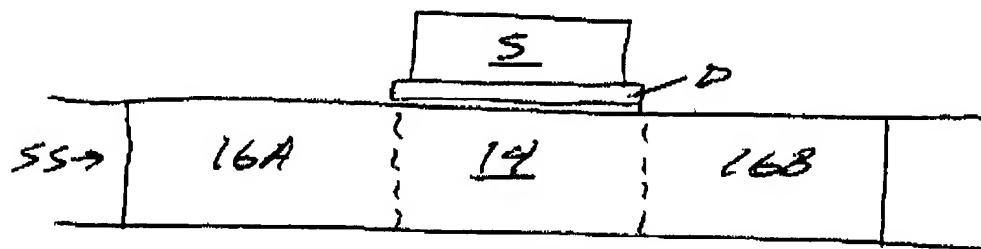


FIGURE 6

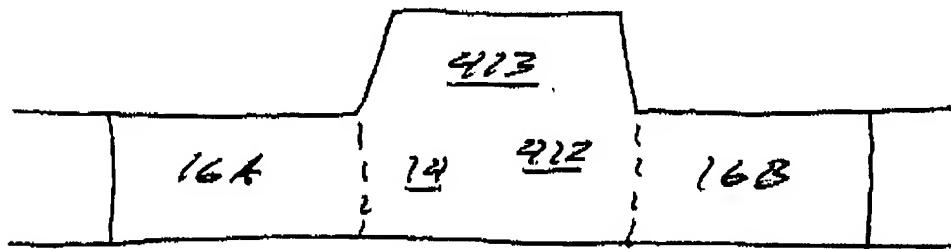


FIGURE 7

ACTIVE WAVEGUIDE DIODE REGIONS					
REGIONS	DOPANT DENSITY	SIZE OF REGIONS	POLARITY	MASKS for Figs. 1, 2, 3	MASKS for Fig. 4
Silicon slab	Light (13)	Slab		None	None
16A	Medium	16A > 17A	16A = 17A	SA or External	External
16B	Medium	16B > 17B	16B = 17B	SA or External	External
17A	Heavy			SA or External	External
17B	Heavy			SA or External	External

FIGURE 8

ACTIVE WAVEGUIDE DIODES		
DIODE TYPE	POLARITY OF REGIONS	
	14	16A, 17A, 16B, 17B
PIN (30A)	None	16A = 17A ≠ 16B = 17B
PNN (30B)	N preferred	16A = 17A ≠ 16B = 17B
DIBL (30C)	N or P	14 ≠ 16A = 17A = 16B = 17B

FIGURE 9

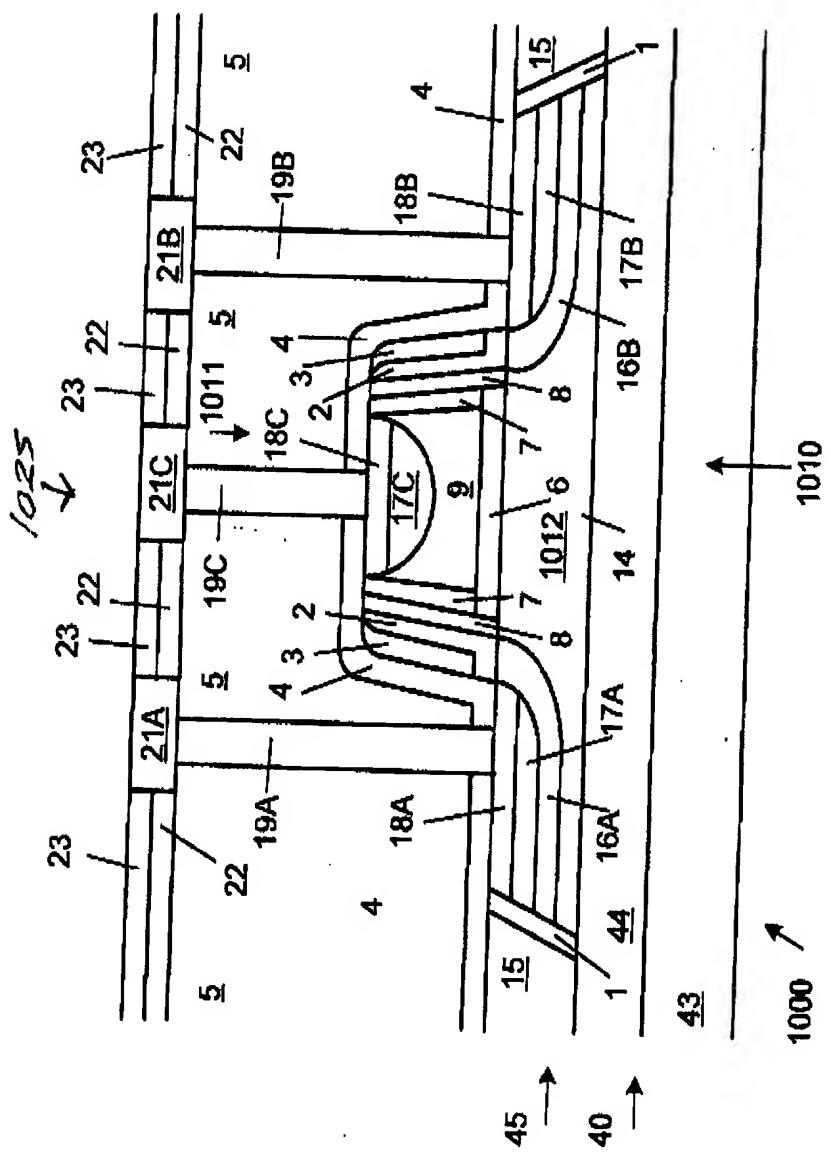


FIGURE 10

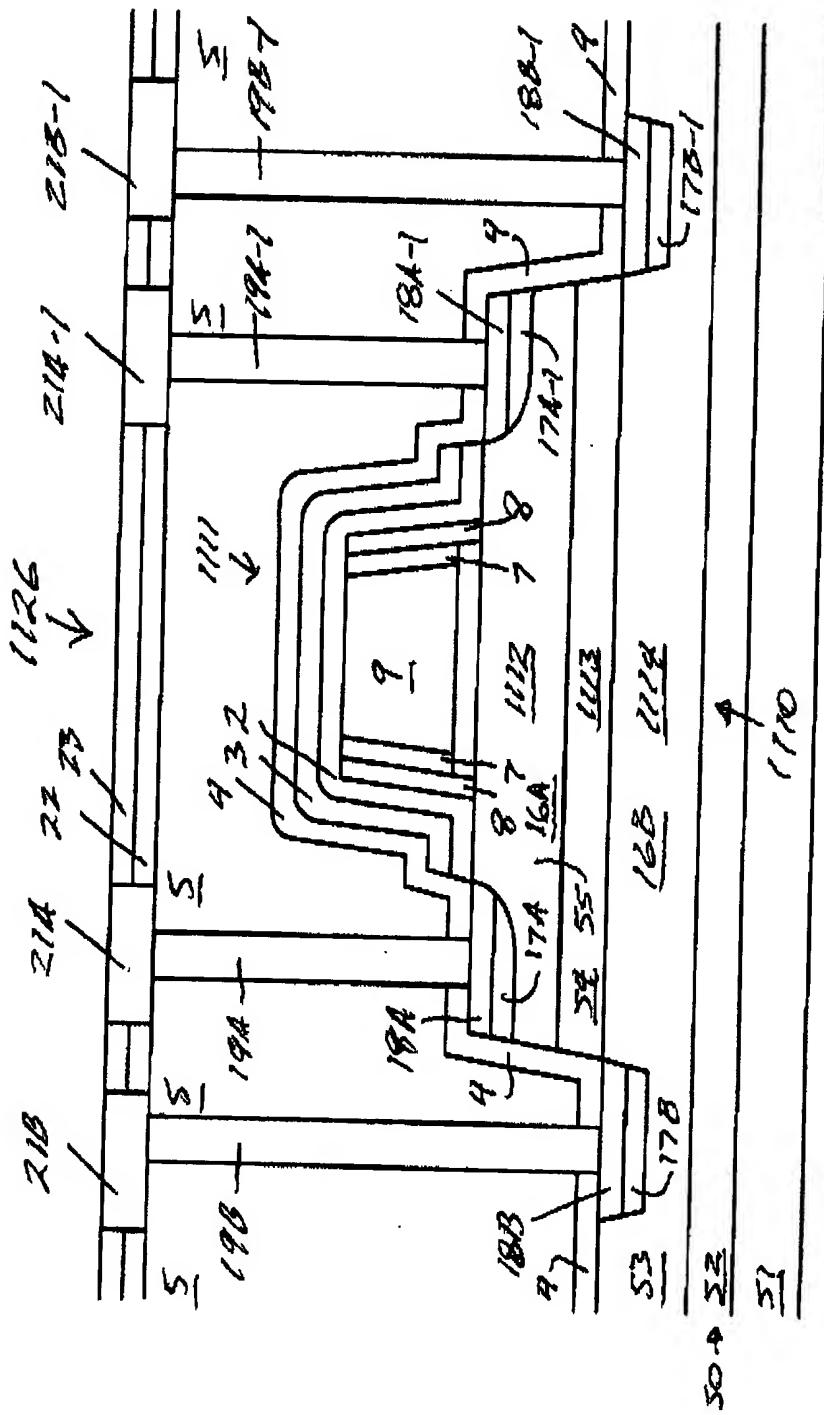


FIGURE 11